

## **I. REMARKS**

Prior to the December 1, 2003 Office Action, Claims 15-17, 20, 30 and 35-51 were pending in the present application. Claims 15, 16, 17 and 30 were rejected by the Examiner as being obvious over U.S. Patent No. 6,295,776 to Kunz ("Kunz") in view of U.S. Patent No. Re. 34,547 to Weldy ("Weldy"). Claims 20 and 41-48 were rejected as being obvious over Kunz in view of U.S. Patent No. 2,012,203 to Peterson ("Peterson") and U.S. Patent No. 1,586,018 to Westberg ("Westberg"). Claims 17 and 20 are cancelled in the present Amendment. With regard to the currently pending claims which have been rejected (claims 15-16, 30, 35-36, and 41-48), Applicant has carefully reviewed the arguments presented in the Office Action and respectfully requests their reconsideration in light of the arguments and amendments presented herein.

Claims 35 and 36 have been rejected under 35 U.S.C. § 112 as being indefinite for depending from a cancelled claim. Claims 35 and 36 were initially submitted as method claims, but are herein amended to depend from independent apparatus claim 16. Applicant respectfully submits that this amendment overcomes the Examiner's indefiniteness rejection, and that claims 35 and 36 recite allowable subject matter as set forth below.

The Examiner has asserted that claims 37-40 and 49-51 are directed to a "drywall joint device with panels," which is independent or distinct from the originally filed invention, and has withdrawn them from consideration. Applicant disagrees with this restriction requirement, but has nevertheless withdrawn, without prejudice, claims 37-40 and 49-51 in accordance with the Examiner's constructive election.

The specification has been amended to clarify, without the addition of new matter, that which was shown in the original disclosure—namely that grooves and ridges may be formed on the inwardly-facing surfaces of the flaps as well as the outwardly-facing surfaces, and that these grooves and ridges may also cooperate with joint compound disposed between the inwardly-facing surfaces and a drywall panel to anchor the device in place. This aspect of the invention is disclosed, for example, in Fig. 3, which has now been amended to clarify the presence of grooves 57 and projecting ridges 59 formed along the inwardly-facing surface of the flaps.

Herein, Claims 15, 16, 35, 36, 41 and 44-48 have been amended, without the addition of new matter, to correct typographical errors, to ensure that they reflect the proper antecedent basis for their claimed elements and to clarify their recitation. Claims 17 and 20 have been cancelled, claims 37-40 and 49-51 have been withdrawn, and new claims 52-55 have been added. Accordingly, the following claims remain presently pending: 15, 16, 30, 35-36, 41-48 and 52-55. Of these, Claims 15, 16, 30, 41, 46 and 52 are independent claims.

## **II. ARGUMENTS**

Prior to the Office Action of December 1, 2003, the present application was filed on June 16, 2003 as an RCE in the form of a Pre-Prosecution Amendment. Amendments were made to the specification and new claims 33-36 were added. Then, on August 12, 2003, Applicant filed an Amendment claiming priority to an earlier filed design patent, and to also further clarify and recite the invention. Claims 33 and 34 were cancelled, and

claims 37-51 were added. These Amendments contained extensive Remarks and Arguments explaining why the amendments were made and why the prior art fails to disclose or teach Applicant's invention. However, in the December 1, 2003 Office Action, the Examiner curiously and inexplicably failed to address any of these arguments with respect to the claims that were pending, choosing rather to simply state that they were "moot in view of new ground(s) for rejection."

Applicant is respectfully confused by the Examiner's refusal to consider these Arguments. The only "new" grounds that the Examiner has now cited, which he did not previously maintain, was in regard to claim 20, which was rejected in view of Kunz, Peterson and the newly added Westberg patent, and is now cancelled in the present Amendment. Previously, all of the remaining then pending claims had been rejected as being obvious over Kunz in view of Weldy, which presently remains the same basis for their rejection. These amendments and arguments were meticulous in addressing Applicant's invention and the teachings of the prior art cited by the Examiner, and in explaining why this prior art does not render the claims obvious. However, for the clarity of the intrinsic record, Applicant will repeat their substance herein while simultaneously addressing the substance of the December 1, 2003 Office Action.

#### **A. Summary of Applicant's Arguments**

In general terms, and as depicted in the preferred embodiment of Fig. 3, Applicant's invention involves a tape-on bead or trim device including a paper flap having projections on its interior surface in the form of continuous ridges, which are

spaced apart to form therebetween indentations that may define grooves. Currently pending independent claims 15, 16, 41, 46 and 52 all include the limitation of such projections, or ridges, being formed on at least the inwardly-facing surface of the flap:

- "the flaps being formed with a plurality of elongated grooves and ridges with at least the inward surfaces including the ridges . . ." (Claim 15);
- "the flaps being formed on both their outwardly-facing and inwardly-facing surfaces with alternating elongated grooves and ridges . . ." (Claim 16);
- "the flap being formed on at least the inwardly-facing surface with a plurality of spaced apart ridges" (Claim 41);
- "forming alternating grooves and ridges on the inwardly-facing surface of the flap . . ." (Claim 46); and
- "the inner sides of the flaps being formed with a plurality of alternating longitudinal flap grooves and ridges for receipt of joint compound . . ." (Claim 52).

Claim 30 is even more restricted in claiming the specific dimensions of the ribs. Weldy's record groove striations would be, at most, several hair widths in height. To increase the dimensions and space the art out laterally could be to go far beyond his teachings. The claimed ridges serve the purpose of anchoring the bead device in joint compound on the surface of the underlying drywall panel. None of the cited prior art references of record disclose or suggest the claimed inventions, nor would any combination of the prior art references achieve Applicant's results.

The principal base reference cited by the Examiner, the Kunz '766 patent, relies on abrading of his paper flaps for anchoring and teaches against other than planar flaps. It was not until after Applicant's invention, when Kunz filed his continuation-in-part

application for what would become the 6,539,680 patent ("680 patent"),<sup>1</sup> that anyone other than Applicant first suggested paper flaps formed on at least their inward faces with laterally spaced apart projections for embedding in compound to facilitate anchoring of the flaps. There is no evidence of record to show that one of skill in the art would have thought applicants claimed construction would achieve the results obtained.

Weldy does not include anchoring projections on the inner side of the flaps of a paper cover, but rather, merely discloses striations on the outer side of a one-piece extruded plastic strip. No where in the art is it suggested how or why these striations should be moved to the inner side, transferred to the flaps of a paper cover and configured of sufficient size to affect anchoring.

Peterson teaches an expansion joint mounted by nailing directly to lathing which is secured to a post, and that the expansion joint is configured as a divider between plaster strips to accommodate shrinkage and expansion. There is no suggestion of anchoring projections on the inner side of paper flaps or of multiple projections in such flaps for anchoring purposes.

There is no evidence of record suggesting any combining of the references or any evidence that, if combined, Applicant's results would be achieved.

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<sup>1</sup> Applicant has filed, concurrently herewith, a continuation application and pre-prosecution amendment for the purposes of provoking an interference with the Kunz 6,539,680 patent.

To appreciate Applicant's invention, it is important to first understand its attributes, and to then contrast these attributes with the teachings of the cited prior art references.

## **B. State of the Art**

In the past several decades, drywall construction has generally replaced lath and plaster construction. Two different types of fitting devices, sometimes referred to as bead devices, have been recognized for covering the joint formed at the corners of joining drywall panels for finishing thereof. These beads are generally known as nail-on and tape-on type construction. Nail-on type beads typically incorporated angular steel flange devices formed with holes for the receipt of nails to anchor the bead in position on the drywall corner. It is known to roughen the exterior surface of those metal beads to facilitate the adherence of joint material thereto. For workmen in the industry, it is important that a corner bead used to finish such a drywall joint be securely mounted and adhered to the joint, while also presenting an aesthetically pleasing outward finish and smooth transition to the adjacent drywall panels.

Therefore, in an effort to more closely match the characteristics of the exterior surface of the bead with the paper exterior of the drywall panels, paper coverings were proposed. These coverings were typically in strip form and could be formed with flexible flat flaps, which projected laterally beyond the longitudinal edges of a rigid core flange to form a gentle transition over the edge of the core. It was common practice to coat the drywall panel with joint compound, underneath where the interior surfaces of such beads

and flaps were to be applied, to provide an adhesive characteristic and to allow the workman, while the layer of joint material remained uncured, to place the bead in position over, for instance, a corner joint to be held in position as the joint was finished off. These beads were particularly referred to as tape-on type beads.

Different constructions were proposed for strengthening the paper flaps, for enhancing the bonding characteristics thereof and for resisting scuffing and the like. A persistent problem remained, however. Without nailing the beads in place, they could be fairly easily pulled loose from the cured joint compound, thus cracking the exposed surface of the joint material and leaving an unsightly finished appearance. It is this problem to which Applicant's invention is directed.

### **C. Applicant's Invention**

Applicant's present invention may generally be described as a relatively rigid core 20 typically formed with one or more flanges 26 and a cover 40 bonded to the exterior of the core. The cover 40 is constructed to project laterally beyond one or more of the respective edges of the flanges 26 to form flap(s) 50 (Fig. 2). The paper forming the flaps 50 is configured, as shown in the preferred embodiment of Figs. 1-3 and 6, with grooves 57 and ridges 59 on their inwardly-facing surfaces 54. It is the inwardly-facing surfaces that are important in securely anchoring the beads in the joint compound. The ridges project from the bottom of the respective grooves to be embedded in the compound to cooperate in mechanically anchoring the flaps against pulling loose.

Consequently, in applying the bead to the drywall corner, the drywall surface under where the interior surfaces 54 of the flaps are to be applied, may be coated in a conventional manner by a joint compound applicator. When applied to the drywall corner, the uncured joint compound will serve to temporarily adhere the bead in place as shown in Fig. 4. The workman may merely press the bead in place on the compound and wipe excess compound from the exterior of the covered core clean with a rag. Joint compound may be feathered out along the exterior to form a gradual transition from the edge 42 of the flaps (Figs. 2 and 3) to present a smooth attractive final appearance.

Once the joint compound has cured, the projections formed by the ridges will be embedded in the compound, which will be particularly effective in anchoring the bead in place. The compound will also occupy the grooves 57 of the inwardly-facing surface 54 of the flaps 50 to form compound ribs, which further assist in anchoring the flaps.

#### **D. The Cited Prior Art**

##### **1. U.S. Patent No. 6,295,776 to Kunz**

The '776 Kunz patent proposes an improvement over U.S. Patent Nos. 5,613,335 and 5,836,122 to Rennich. Kunz proposes a conventional core 12 having a central arcuate nose 14, with flanges 16 and 18 extending therefrom. A paper cover strip 20 covers the core and includes flaps, or wings 22 and 24, which project beyond the edges of the flanges. There are no grooves or ridges formed on any of the surfaces of these wings. The nose forms a raised straight edge so that joint compound applied to the outwardly facing surfaces of the flanges, when smoothed by a trowel following the straight edge,



will form horizontal cross sections defining wedges as shown at 28, Fig. 2. He incorporates some small diameter holes in his flat paper wings, suggesting that joint cement 28 be "applied to the exterior surface thereof" (col. 4, lines 48-51) (emphasis added). Again at Column 4, lines 62-65, Kunz teaches that joint cement is applied over the bead, "to cover the strip 20 from nose 14 outwardly over wings 22 and 24 . . ."

It is also recognized in Column 2 that Rennich disclosed a tape-on bead utilizing a stock paper layer impregnated with latex or a similar strengthening compound. Kunz criticized the use of stock paper impregnated in this manner in that it exhibits poor compound bonding characteristics (Column 2, line 25). He states that he has observed the peeling of the paper away from a joint compound bond thus exhibiting failure to meet a specific ASTM standard. Thus, he describes forming the cover strip of a stock paper having high abrasion resistance, and which is dimensionally stable on contact with wet joint compound. He proposes abrading the surface to loosen the surface fibers to increase the bond strength of the corner bead when installed on a drywall board (Column 2, lines 55 – 59; Column 4, lines 36-44). He further asserts that one of the advantages of his sandback paper is that it may be produced without impregnation of latex or other strengthening compound (Column 4, line 30 -33).

Contrary to Kunz, the preferred embodiment of Applicant's invention is formed with projections, which may be in the form of continuous ridges, on the underside of the flaps, which cooperate with joint compound applied thereunder to anchor the flaps in place. It also allows for the use of paper strengthened with latex or the like (see originally filed specification, page 10, lines 8-19).

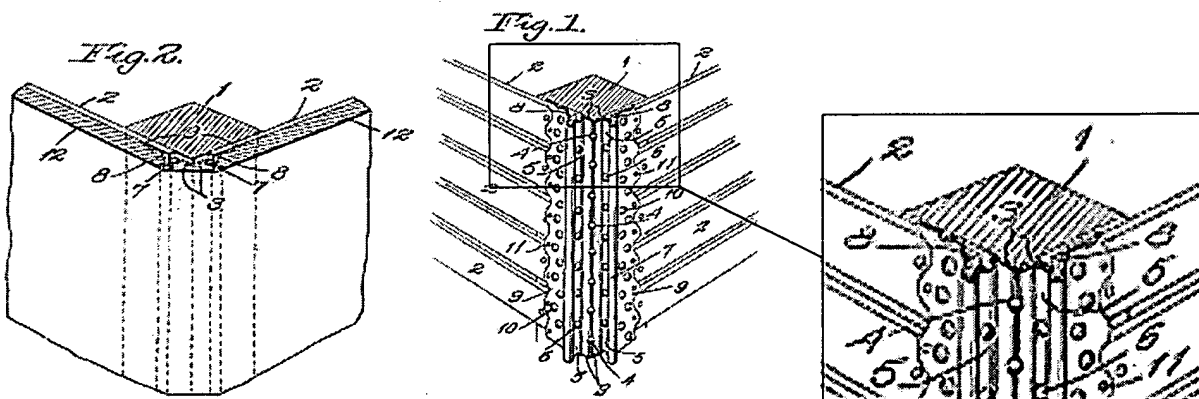
The Examiner has correctly concluded that Kunz does not incorporate grooves and ridges, on either the interior or exterior surface of his flaps, to cooperate with joint compound in anchoring his corner bead. Rather, he relies on the high strength sandpaper backing, apparently for tensile strength, and on the abrading thereof, and joint compound applied to the exterior surface of the device, for his anchoring feature.. One skilled in the art would recognize that such abrading of the surface of a paper flap would serve to denigrate the structural integrity of the paper and its ability to take permanent set when flexed beyond its yield point, as shown in Figs. 3 and 6 of Applicant's drawings, to form the projecting ridges to achieve enhanced anchoring with the attendant denigration of the structural integrity of the paper. Consequently, Kunz, in relying on abrading to achieve enhanced anchoring with the attendant denigration of the structural integrity of the paper, teaches away from the concept of providing un-denigrated paper to be formed with grooves and ridges to provide projections on a portion of the body of the paper to anchor in the compound.

The fact that Kunz did not appreciate the benefits of forming the body of unabraded paper with a part of such body projecting inward from the surface of paper flaps to enhance the anchoring effect is further borne out by the fact he only later thought of the idea as reflected in his later filed continuation-in-part U.S. Patent Appl. Serial No. 09/967,335, which depends from the Kunz '776 patent. This application was filed on September 28, 2001 and issued on April 1, 2003 as U.S. Patent No. 6,539,680. Therein, Kunz discusses the formation of dimples 26 by pressing "an indented profile into the paper . . ." which act as "standoffs" to provide for "a uniform depth of mud 30 along the

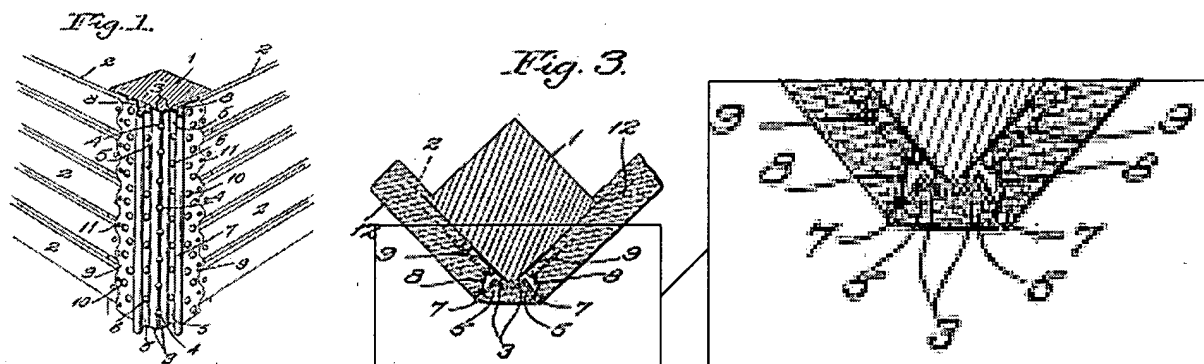
entire length of wings 22 and 24, as well as providing anchorage into the joint compound or "mud." (Kunz '680 patent, column 4, lines 3-23). Kunz's then claims the dimples by the following recitation: "said wings having a plurality of spaced-apart, uniform depth depressions formed therein and projecting from an inward face of the wing." (Kunz, '680 patent, column 4, lines 54-56). Had it been obvious to Kunz to modify the prior art and combine it as suggested by the Examiner, he would have done so in 2000 when he filed the application for his '776 patent. This is a particularly cogent fact demonstrating unobviousness, and is one for which the Examiner had no answer in his action.

## 2. U.S. Patent 2,012,203 to Peterson

The Peterson patent is not directed to a drywall bead. Rather, he shows an expansion joint constructed entirely of stamped or pressed continuous sheet of metal which is intended to embrace the exterior corner of a square in cross-section post 1. Referring to Peterson's Fig. 2, lathing 2 lines the orthogonal surfaces of the post 1 up to respective points spaced from the exterior corner of the post 1.



The expansion joint is formed at its orthogonal outer extremities with wings, or leaves 9, configured with smaller nail openings 11 (see Fig. 1) intended for receipt of nails to nail the joint to the lathing 2 overlying the surfaces of the post. The joint is further formed with outwardly projecting first and second flanges, 5 and 8 respectively, which converge outwardly toward one another in a tower shape. Along the outer, free edge of each pair of flanges 5 and 8 is formed a circular in cross-section roll or hollow rib 7, which is disposed at the outer surface of the plaster 12 (Figs. 1 & 3).



Formed between the first set of flanges 5 are respective orthogonal wings 3, which are joined together at the corner of the post 1 and appear to be in contact with such post on their inner surfaces (Column 1, lines 24-26). The purpose of the triangular and cross-section converging flanges 5 and 8, along with the hollow rolls 7, appears to be to form "open folds which impart flexibility to the beads so that considerable shrinkage in the plaster may occur without causing brakes or unsightly cracks." (Column 1, lines 54-58)

Consequently, it is apparent that Peterson's construction and objectives are far different from those of Kunz or Applicant. Peterson merely seeks a metal expansion joint to be in direct contact with a vertical corner post and to be nailed in overlying relationship positioned directly on the outside surface of the lathing. Peterson's bead is configured such that outwardly projecting convergent flanges and rolled ribs act as dividers defining respective vertical breaks in the plaster to provide for springiness and flexibility and to allow for shifting and shrinkage in the plaster. The Examiner has failed to show there is any such concern about shrinkage in drywall panels. Thus, the Examiner has failed in his attempt to demonstrate an incentive to transfer technology from Peterson's flex joints to a paper flap, and to the inward facing surface thereof, or to construct his flex joint so as to provide projections to be embedded and anchored in joint compound. As set forth below on pages 42-43, it is possible it was the Examiner's confusion about the objectives of Peterson and Applicant which led to the erroneous belief that a mere substitution of the Peterson flex joint in Kunz would produce Applicant's results.

### **3. U.S. Patent No. Re. 34,547 to Weldy**

Weldy recognizes some of the shortcomings of two-piece corner bead construction incorporating a metal core. In an effort to overcome these shortcomings, he proposes extruding a one piece plastic strip formed with an integral core and reduced thickness flanges 14. He also proposes an integral longitudinal projecting tongue 32. Importantly, his claimed strip is "formed from a single piece of plastic . . ." (Column 4, lines 35-36),

and to secure the device to a drywall panel, "nails 16 are hammered directly through the flanges 14 and through the drywall 18 . . ." (Column 3, lines 21-23; Fig. 2).

While not generally concerned with a tape-on type construction, Weldy does acknowledge that the flanges 14 may be "striated as shown at 24 on their surface which will face outwardly" much like record grooves to form a roughened area for holding the mud in place on the exterior. (Column 3, lines 34-37) (emphasis added). However, there is no mention of inward projections, which might form grooves and ridges and facilitate anchoring to the drywall panels 18, or even that his striations should be formed on the inwardly-facing surface. Nor would there be any motivation to form grooves and ridges on Weldy's interior surfaces since the flanges are nailed in position and there is no need for additional anchoring elements (See e.g. Fig. 2). In fact, to move Weldy's striations to the underside would be to defeat his objective of seeking to adhere plaster to the exterior surface.

#### **4. U.S. Patent No. 1,586,018 to Westberg**

Westberg is also not directed to a drywall corner bead, but rather, is only directed to the underlying plaster board. Westberg discloses a plaster board 1, covered respectively on its top and bottom surfaces with paper coverings 2 and 3 (Column 1, lines 30-33), and forming the "outer or plaster receiving side 2" of the plaster board with a plurality of "indentations 7 and projections 8." (Column 2, lines 49-51) (emphasis added). These indentations and projections cannot be equated to projections from the body of paper flaps to be received in joint compound.

Westberg is not concerned with drywall joints or coverings to cover his plaster board paper coverings. Rather, he focuses on what appears to be paper coverings 2 and 3, which he prefers be waterproof. The paper covering on the plaster receiving side (i.e. the outward facing surface of Westberg's plaster board shown at element 2) is formed with what appears to be semi-spherically shaped projections constructed to receive "plaster". He does not suggest constructing a joint bead with any type of paper flap, which is itself constructed with projections toward the drywall for embedding in joint compound. In fact, there is no teaching of how any such paper flaps on drywall beads could cooperate with the construction shown in Westberg, or how Kunz could be revised to incorporate Westberg's construction and achieve Applicant's results.

**E. Rejections of Claims 15-17, 20, 30, 35-36 and 41-48 Under 35 U.S.C. § 103**

In the December 1, 2003 Office Action, claims 15, 16, 17 and 30 were rejected by the Examiner as being obvious over Kunz in view of Weldy. Claims 35 and 36 were rejected as being indefinite for depending from a cancelled claim, but now stand amended to depend from rejected claim 16. Claims 20 and 41-48 were rejected as being obvious over Kunz in view of Peterson and Westberg. Claims 17 and 20 have been cancelled in the present Amendment, leaving presently pending claims 15, 16, 30 and 35-36 rejected as obvious in view of Kunz and Weldy, and claims 41-48 rejected as obvious in view of Kunz, Peterson and Westberg.

As set forth in detail above, in the Summary of Applicant's Arguments section, independent claims 15, 16, 41, 46 and 52 all include the limitation of projections, which

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As set forth in detail above, in the Summary of Applicant's Arguments section, independent claims 15, 16, 41, 46 and 52 all include the limitation of projections, which



may be in the form of ridges, being formed on at least the inwardly-facing surface of the flap for the purpose of anchoring the bead device in compound on the surface of an underlying drywall panel. As also detailed above in the Cited Prior Art section, none of the cited prior art references include such a limitation, or suggest that it would be obvious to one of skill in the art.

It is the Examiner that has the initial burden of establishing a *prima facie* case for non-patentability. In the present Office Action, the Examiner has misconstrued the prior art and has made conclusory statements regarding the alleged obviousness of certain claimed features of the present invention without citing to a suggestion in any prior art reference for making the proposed and necessary combinations. Applicant respectfully submits that, in asserting his rejections under 35 U.S.C. § 103, the Examiner has improperly employed a hindsight approach, effectively using Applicant's invention as a roadmap of how prior art references might be combined.

This approach has been universally condemned by the courts. *See, e.g., Diamond Rubber Co. of New York v. Consolidated Rubber Tire Co.*, 220 U.S. 428, 31 S. Ct. 444 (1911); *In re Kamm and Young*, 172 U.S.P.Q. 298 (C.C.P.A. 1972); *Ex parte Lang*, 72 U.S.P.Q. 90, 91 (C.C.P.A. 1947) ("It seems to us that the Examiner is using appellant's disclosure for the suggestion of the combination since there is no suggestion in any of the patents for their combination in the manner claimed by applicant."); *In re Leonor*, 158 U.S.P.Q. 20, 21 (C.C.P.A. 1968) (the court reasoning that the issue is "whether teachings of prior art would, of themselves, and without benefit of applicant's disclosure, suggest [a process] which would make the claimed invention obvious . . ." (emphasis court's)); *ACS*

*Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929 (Fed. Cir. 1984); and *W.L. Gore Assocs., Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). It is Applicant's belief that, when the requirements for making out a *prima facie* case of obviousness are correctly applied, there can be found no suggestion or motivation, whether in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the cited prior art references, or to combine their teachings, to arrive at Applicant's claimed invention, as is required under MPEP § 706.02(j).

## **1. Rejections of Claims Based on the Combination of Kunz and Weldy**

### **(a) Claim 15**

Claim 15, as amended, recites a relatively rigid core with a convex configuration, sometimes referred to as a bull nose shape, a paper cover bonded to the outer surface of the core and formed with flaps having outward and inward surfaces. The flaps are configured with elongated grooves and ridges with at least the inward surfaces including the ridges, for anchoring into joint compound, and at least the outward surfaces including the grooves, which are formed with spaced apart perforations.

Applicant respectfully submits that neither Kunz nor Weldy, alone or in combination, include all of the limitations of claim 15. For example, claim 15 has been amended to recite that at least the inward surfaces of the flaps of the paper cover are formed with ridges for anchoring into joint compound. The Examiner has admitted that Kunz does not disclose a "flap having elongated grooves lengthwise and ridges disposed in alternating fashion along the outwardly facing surface, the flaps having perforations

along the grooves." However, he argues, without support, that Weldy provides these missing limitations. These arguments can only be made by disregarding the fact that Weldy does not teach how or why his striations should be modified to provide projections to anchor in joint compound. Moreover, the Examiner is forced to disregard the real world fact that Kunz, who relied on abrading, failed to recognize that Weldy could either be combined with his invention or should be modified to act as projections into joint compound.

The Examiner has failed to present any evidence that one of skill in the art would be motivated to combine Weldy with Kunz. In fact, the record demonstrates that they both work on different principles. Weldy is formed from a single, extruded strip of plastic and may be categorized as a "nail on" type corner bead by, for example, Fig. 2, which shows nails 16 that secure the strip in place (see also Column 3, lines 21-24: "nails 16 are hammered directly through the flanges 14 and through the drywall 18 into the wooden stud 20 . . ."). Weldy does not contemplate a paper cover, or that such a cover be formed with flaps having grooves or ridges for providing an anchoring effect in combination with joint compound applied to the underside. In fact, Weldy recognizes the shortcomings of corner bead cores, such as his, that are not covered by a paper cover in that he perceives that a primer 28 will be needed to "help the paint and mud bond to the strip." (Column 3, lines 56-58).

On the other hand, while Kunz teaches a paper covering for overlaying a central core, to "increase the bond strength of the corner bead when installed" Kunz abrades the surface of the paper cover strip to partially loosen the surface fibers. (Column 2, lines

56-59). To complete the installation, Kunz explains that the "corner bead 10 is applied in the conventional manner for tape-on beads." (Column 4, lines 62-63). Thus, it is this abraded surface that Kunz relies upon for what he hopes is a strong bond when joint compound is applied thereover and sanded to a finish, not grooves and ridges formed in his wings.

Kunz understood that tape-on beads performed better because joint cement for finishing the corner will adhere significantly better to the paper strip than to the exposed metal of nail-on beads (column 1, lines 55-60). Therefore, a skilled artisan would not be motivated to combine a tape-on type corner bead, such as in Kunz, with a nail-on type of corner bead, such as in Weldy, because the objective of using a tape-on bead is to obviate the need for nailing the device in place.

More importantly, there is no evidence of record that one skilled in the art would know how to modify Weldy to enlarge the striations or re-position them to act as anchors into joint compound.

**(b) Claim 16**

Claim 16, as amended, recites a drywall corner protection device including a core and a paper cover bonded to the core and extending beyond its longitudinal edges to form flaps. The flaps of claim 16 are formed on both their inwardly and outwardly-facing surfaces with alternating grooves and ridges, and perforations are formed in the grooves of the outwardly-facing surfaces which extend through the flaps to provide for communication of joint compound between the flap surfaces. The Examiner rejected prior claim 16 for the very same reasons as Claim 15 (i.e. the combination of Kunz with

Weldy), despite the fact that claim 16 adds additional limitations to claim 15 which are also not found in the combination of Kunz with Weldy.

For example, claim 16 recites that grooves and ridges are formed on both the inwardly and outwardly-facing surfaces of the flaps of a paper cover, that they be formed "to provide linear stiffness in said flaps..." and that the flaps be formed with perforations along the grooves to receive joint compound to act as anchoring posts.

Kunz fails to focus on linear stiffness, and Weldy's plastic bead affords sufficient stiffness itself.

**(c) Claims 35 and 36**

The Examiner has rejected Claims 35 and 36 as indefinite for depending from a cancelled claim. This error has been rectified in the amended claims. Claim 35 depends from, and further restricts, claim 16, reciting that the paper cover is formed from the mixing of fibers and strengthening compound at the time of manufacture. Claim 36 depends from claim 35, adding the encapsulation of these fibers by the strengthening compound. As claim 16 is not rendered obvious by the combination of Kunz with Weldy, it follows that the additional limitations of these claims are in no way anticipated or rendered obvious by them.

In fact, the Examiner's base reference, Kunz, specifically teaches away from these limitations when he criticizes paper impregnated with latex or other strengthening compound as it performs poorly when subjected to tests which measure resistance to peeling (Column 4, lines 6-16). Rather, Kunz teaches the selection of a sand backed

paper that "is produced without the impregnation of latex or other strengthening compound . . ." (Column 4, lines 28-33).

As suggested by the allowance of claims directed to the strengthened paper of Claim 35 in Applicant's companion case 09/825,766, filed April 3, 2001 (referred to on Page 10 of Applicant's originally filed specification), none of the prior art suggests the combination of such paper strengthened at the time of manufacture. This construction affords an important improvement over the prior art. With Applicant's groove and ridge construction, a much higher integrity anchoring is provided in the compound joint beyond that which would be provided by Kunz's invention, thus elevating the need for a high tensile strength paper flap which will not tear before the ridge and groove anchor gives way. Untreated paper flaps would possess a low tensile strength which would tear easily, thus failing to provide the full benefits of the invention of Applicant's claim 35.

Claim 36 depends from claim 35 and is further restricted by the strengthening compound encapsulating the fibers. Nowhere in the art is it suggested to encapsulate fibers with the compound at the time of manufacture. Consequently it is likewise believed that this claim is allowable.

Because the Examiner's base reference explicitly teaches away from the recitation of claims 35 and 36, and because the prior art does not suggest their limitations, Applicant respectfully submits that they are now in condition for immediate allowance.

**(d) Claim 17**

Claims 17 has been cancelled in the present Amendment.

**(e) Claim 30**

The Examiner has rejected Claim 30 as being obvious in view of the combination of Kunz and Weldy. Claim 30 is even more limited than the claims addressed above in calling for the paper flaps to be formed with the parallel grooves spaced 1/8th of an inch apart and ribs measuring 1/64th of an inch high.

Since Kunz was satisfied with his abraded fiber flanges, there is no suggestion of substituting some different anchoring device therefore. In fact, one skilled in the art would understand that abrading the paper flanges would likely diminish the capability of the paper to take and maintain a permanent set when formed by the manufacturing methods shown in Figs. 5 and 6 of Applicant's drawings. Consequently, Kunz not only fails to teach the need for ridges in a paper flap, but also teaches away from the thought that a permanent set could be made in paper flanges to define ridges to better anchor the paper.

The Examiner asserts that Applicant's invention of Claim 30 would be arrived at by combining Kunz with Weldy's "plurality of perforations (26, figure 1) spaced equidistant along the grooves . . ." However, as set forth in detail above, the Examiner fails to note that, in Applicant's claimed invention, the ridges are formed in the flaps of a paper cover of sufficient height to embed in the joint compound and anchor the flaps. There is no evidence of record suggesting that Weldy shows anything more than striations the size of sound recording groups on the outer surface of an integral piece of plastic possibly defining minute ribs therebetween of some undetermined but minimal height. Such fine, narrow and short ribs would provide little more than a roughening of

the surface of the plastic to facilitate coating with plaster. Until Applicant's work, there was no teaching that paper could be formed with anchoring ribs (not just striations) or that the ribs would actually be embedded in the joint compound to anchor the trim in place without, as shown in Weldy, nailing as through the nail holes shown.

## **2. Rejections Based on the Combination of Kunz with Peterson and Westberg**

### **(a) Claim 20**

The Examiner has rejected claim 20 as being obvious over Kunz in combination with Peterson and Westberg. Claim 20 has been cancelled in the present Amendment.

### **(b) Claim 41**

Claim 41 stands rejected as being obvious over Kunz in combination with Peterson and Westberg. Applicant respectfully notices that the Examiner has failed to address or consider the full substance of claim 41, evidently confusing its recitation as being similar to that of cancelled Claim 20. In its original form, and as amended for clarification herein, Claim 41 recites a drywall fitting having an elongated core and a paper cover extending beyond at least one edge of the core to form an elongated flap having an inwardly-facing surface and an outwardly-facing surface. A key aspect of this claim, which has escaped the Examiner's consideration, is that the inwardly-facing surface of the flap is formed with a plurality of spaced apart ridges.

Applicant respectfully submits that this construction is not disclosed in any of the cited prior art references, and that the combination of these references similarly fails to teach this limitation. The Examiner has admitted that Kunz does not teach ridges formed on the outwardly-facing surface of his flap, and it follows that likewise, there are no such



ridges on his inwardly-facing surface. As set forth above, had it been obvious for Kunz to include projections, such as ridges, formed on the inwardly-facing surface of his wings, or flaps, he would have done so at the time of filing the '776 patent, rather than adding disclosure to this effect in his CIP '680 patent (filed after the present application).

In regards to Westberg, Applicant respectfully points out that Westberg's plaster board, while not being related to a corner bead, also fails to disclose this limitation. As set forth above in the description of the prior art, the Examiner has wrongfully equated Westberg's indentations 7 and projections 8 to projections defining grooves and ridges to anchor in compound applied on the outside of drywall panels. Nevertheless, this mischaracterization of Westberg's disclosure is of no moment in light of the fact that Westberg only teaches that his indentations and projections are formed on the paper covering the "outer or plaster-receiving side 2" of his wallboard. (Column 2, lines 48-50; Figures 1-3). As shown in detail in Westberg's Figures 1 and 3, the paper covering of the opposite, or inner side 3 of his wallboard is not formed with any such indentations and projections, but is planar.

Additionally, Peterson does not suggest in any way the covering of a core with a paper cover and the forming of ridges on the inwardly-facing surface of the flap. As a matter of initial note, at page 3, paragraph 5 of the Office Action, the Examiner has wrongfully described Peterson as having a "cover." As shown in Figure 1, Peterson discloses a single piece, unitary bead which is "pressed or stamped from a sheet metal blank . . ." (Column 1, lines 19-20). He makes no mention of a paper cover for covering this single metal sheet.

Moreover, in the same paragraph, the Examiner has cited Peterson as providing the objective of grooves and ridges "to compensate for the plaster shrinkage and expansion." He then concludes that it would have been obvious to modify Kunz to show a "flap having lengthwise grooves and with ridges . . . because it would enable the cover to compensate for expansion and shrinkage in the plaster as taught by Peterson . . . ." (Office Action, page 4, paragraph 2). Applicant respectfully submits that the Examiner's stated motivation for combining Peterson with Kunz ("because it would enable the cover to compensate for expansion and shrinkage of the plaster") is irrelevant because Applicant has nowhere stated that this is an objective of his claim 41 invention or argued for its patentability on this basis.

Moreover, even if it were an objective of Applicant's invention, Kunz's '776 patent fails to envision projecting ridges from his wing/flaps, and makes no mention of compensating for expansion or shrinkage of the plaster by such ridges. Thus, the Examiner has failed to provide any basis by which one of skill in the art would be motivated to combine Kunz with Peterson to arrive at Applicant's claim 41 invention. The mere fact that the Kunz and Peterson references may be modified does nothing to discharge the Examiner's burden of demonstrating that the invention of claim 41 is *prima facie* obvious. In light of the fact that the Examiner's basis for combining Peterson with Kunz is for the purpose of accomplishing an objective that is neither stated by Applicant's disclosure, nor by the base Kunz reference, there is no showing that the modification and combination of Kunz and Peterson is suggested by the prior art. *See e.g. In Re Fritch*, 972 F.5d 1260, 1265, 1266 U.S.P.Q. 1596, 1598 (Fed. Cir. 1988).

Also, the Examiner has curiously mischaracterized Peterson's outwardly extending first flanges 5 as lengthwise grooves, and therefore erroneously equates his hollow rib 7, formed along the "outer free edge of each flange," to a ridge. (See generally Column 1, lines 25-37; specifically lines 31-33). In Peterson, the only elements that extend beyond what would arguably be his core are the leaves 9, which project from the edges of the second flanges 8 to overlie the lathing 2. As is evident from his Figures, these leaves are not formed with ridges defining projections to anchor in joint compound.

Because neither Kunz nor Peterson nor Westberg individually teaches a core covered by a paper covering forming a paper flap, with ridges formed on the inwardly-facing surface of the flap; there is also no motivation to combine them to arrive at the invention of Claim 41. Therefore, Applicant respectfully urges the Examiner to reconsider his rejection, and early notice of allowance of claim 41 is solicited.

**(c) Claims 42-45**

Claims 42-45 depend from and further restrict claim 41, and are therefore respectfully believed to similarly be in condition for immediate allowance. Claims 42-44 add additional limitations that, in combination with the limitations of claim 41, are not taught by the cited prior art. The same applies for claim 45, however, Applicant wishes to further call to the Examiner's attention the fact that none of the cited prior art references disclose such ridges formed on the inwardly-facing surface of the flaps in combination with grooves formed on the outwardly-facing surfaces and through openings formed in the bottoms of such grooves.

**(d) Claim 46**

Claim 46 recites a method of making a drywall joint protection strip device including selecting an elongated core, selecting a paper cover, bonding the cover to the core so that it extends beyond the edge of the core to form a flexible flap, and the forming grooves and ridges on the inwardly-facing surface of the flap to be embedded in joint compound applied between the flap and a drywall panel. The Examiner has rejected Claim 46 by insufficiently stating merely that "the claimed method steps would have been the obvious method steps of making Kunz's device." Since the Examiner has acknowledged that Kunz does not disclose grooves and ridges formed in a paper flap, Applicant is respectfully confused as to how this can be true.

Nevertheless, as similarly set forth in detail above in connection with claims 15, 16 and 41, none of the cited prior art references teach bonding a selected paper cover to a core so that it extends beyond the edge of the core to form a flap and forming grooves and ridges on the inwardly-facing surface of the flap. However, even if they did, they all fail to disclose embedding these grooves and ridges in joint compound disposed between the inwardly-facing surface of the flap and the marginal edge surfaces of abutting drywall panels to anchor the device in place.

Specifically, Kunz only discloses that: "Once the joint cement covering the cover strip 20 from nose 14 outwardly over the wings 22 and 24, has dried, the joint cement is sanded." (Kunz, Column 4, lines 63-65). Westberg specifically refers to the "outer or plaster receiving side 2" of his wallboard. (Westberg, Column 2, lines 49-50). Peterson describes is Figure 1 as "the corner bead in position before the plaster is applied thereto"

(Peterson, Column 1, lines 11-12), meaning that his bead is nailed to the lathing before the plaster is applied thereover. Even Weldy, which was not cited by the Examiner in connection with his claim 46 rejection, teaches that his striations 24 "provide a purchase for mud or plaster applied over the side flanges . . ." (Weldy, Column 3, lines 43-48).

Because the cited prior art references fail to disclose the method of claim 46 as set forth above, Applicant respectfully submits that it is now in condition for immediate allowance.

**(e) Claims 47-48**

Claims 47 and 48 depend from and further restrict claim 46, and are similarly believed to be in condition for immediate allowance. Similar to the discussion of claim 35 above, the prior art fails to teach forming the paper cover from fiber elements mixed with strengthening compound at the time of manufacture, as called for in claim 47. Also, as similarly set forth in connection with claim 45, the prior art also fails to disclose grooves and ridges formed on the inwardly-facing surface of the flaps, with grooves also being formed on the outwardly-facing surface and perforations in such grooves for receipt of joint compound.

**F. Newly Added Claims 52-55**

Claims 52-55 are newly added in the present Amendment. Newly added claim 52 is an independent utility claim, with claim 53 further restricting and depending therefrom. Claim 54 depends from dependent claim 53, and claim 55 also depends from independent claim 52.

Claim 52 calls for a drywall corner protection strip device for protecting a drywall corner joint having a core, a paper cover bonded thereto and extending beyond the core to form flaps, grooves and ridges formed on the inner sides of the flaps, and joint compound interposed between the inner sides and the drywall with the compound filling the grooves and anchoring the flaps. Claim 53 adds the further limitation of perforations formed along the length of the flaps and filled with joint compound to further resist displacement of the core. Claim 54 adds that grooves are also formed on the outer side of the flaps and aligned with the rows of perforations to cooperate in funneling compound to the perforations. Claim 54 further calls for the grooves and ridges to be continuous throughout the length of the flaps. Applicant respectfully submits that the above described construction is not taught in the prior art, and that claim 52, and its related dependent claims 53-55, are in condition for immediate allowance.

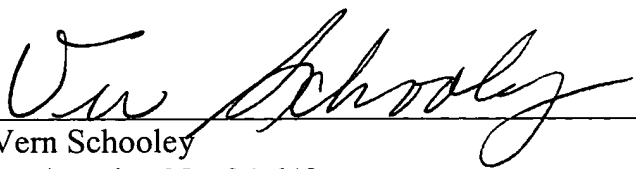
### **III. CONCLUSION**

From the foregoing it is apparent that Applicant has made a valuable contribution to the art. The claims now in the case patentably distinguish over the prior art of record and are believed to be in condition for allowance. Consequently, early notice of allowance is respectfully solicited.

In the event the Examiner should not be in agreement, it is respectfully requested that he contact the undersigned attorney to discuss any revisions that should be made to the claims to place them in condition for allowance.

Respectfully submitted,

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